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Research Note NE-374



Bulletin of Hardwood Market Statistics: First Half 2001

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Abstract

Provides current and historical information on primary and secondary hardwood products, production, prices, international trade, and employment.

Introduction

Data contained in this bulletin are intended to provide a general overview of recent trends in the hardwood market for use by hardwood-related industries, forest managers, the academic community, and the general public. The statistics presented in this bulletin are not inclusive. Specific series were selected on the basis of their availability and completeness, and were derived from a variety of sources. Questions about data collection procedures should be directed to the issuing agency or organization.

The import and export data for hardwood logs, lumber, veneer, and plywood reported here are reproduced in their entirety as received from the U.S. Department of Commerce, Bureau of the Census. Reporting errors have occurred in the

past due to coding and computing program errors and changes in tariff systems. For information on these errors, see Luppold (1995). Readers interested in export and import data are encouraged to reference additional sources when evaluating international trade statistics. For additional information on the international trade series presented here, please contact Bruce Hansen at 304-431-2739.

Readers interested in price data for specific subregions of the domestic hardwood market are encouraged to contact state forestry officials for information on local market conditions.

Your input is critical in helping us make this bulletin more useful. We welcome comments or suggestions on additional data series to include or different breakdowns of the data currently reported. Copies of this bulletin are free upon request. Send your comments and requests to David M. Emanuel at the address below.

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Tables included in this series of reports and frequency of update

Number	Title	Frequency of update
Hardwood Stumpage, Log, and Lumber Prices		
1	Average hardwood stumpage prices in northwestern Pennsylvania, 1996-2001	Quarterly
2	Average hardwood stumpage prices in Missouri, statewide, 1996-2001	Quarterly
3	Average hardwood stumpage prices in Maine, statewide, 1995-2000	Yearly
4	Average hardwood stumpage prices in the northern and delta and river regions of Mississippi, 1996-2001	Bi-monthly
5	Average hardwood stumpage prices in Ohio, statewide, 1996-2001	Bi-annual
6	Average hardwood mill prices of grade 1 logs in northwestern Pennsylvania, 1996-2001	Quarterly
7	Average hardwood mill prices of grade 1 logs in Missouri, statewide, 1996-2001	Quarterly
8	Average hardwood mill prices of grade 1 logs in eastern Tennessee, 1996-2001	Quarterly
9	Average hardwood mill prices in the northern and delta and river regions of Mississippi, 1996-2001	Bi-monthly
10	Average hardwood mill prices of red oak logs in Ohio, statewide, 1996-2001	Bi-annual
11	Air-dried hardwood lumber prices, 1996-2001	Quarterly
12	Kiln-dried hardwood lumber prices, 1996-2001	Quarterly
Hardwood Product Prices, Production, and Employment		
13	Producer price indexes for selected wood industries, 1996-2001	Quarterly
14	Value of domestic wood furniture shipments and wood furniture imports, 1994-1999	Yearly
15	Production of oak strip flooring, 1995-2000	Yearly
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International Hardwood Product Trade		
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19	Volume and value of U.S. hardwood lumber exports, by region, 1996-2001	Quarterly
20	Volume and value of U.S. hardwood veneer exports, by region, 1996-2001	Quarterly
21	Volume and value of U.S. hardwood plywood exports, by region, 1996-2001	Quarterly
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27	Volume and value of U.S. exports of nonconiferous chips, by region, 1996-2001	Quarterly

HARDWOOD STUMPAGE, LOG, AND LUMBER PRICES

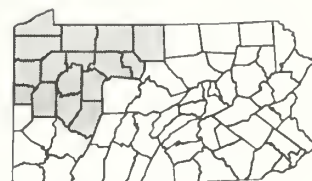


Table 1.--Average hardwood stumpage prices in northwestern Pennsylvania, 1996-2001
(Dollars/Mbf, International 1/4" scale)

Year/quarter	Red oak	White Oak	Black cherry	Hard maple	Soft maple	Yellow-poplar
1996	487	227	790	195	110	112
1997	514	227	978	297	163	131
1998	520	216	1,103	303	175	116
1999	504	217	1,347	313	182	133
2000/1	501	249	1,066	337	175	143
2000/2	624	241	1,458	399	209	166
2000/3	549	244	1,812	439	214	158
2000/4	639	259	1,995	397	225	160
2000 avg.	578	248	1,583	393	206	157
2001/1	498	216	1,353	380	197	148
2001/2	489	209	1,297	359	214	150
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---

Source: Cooperative Extension Service, U.S. Department of Agriculture, Pennsylvania State University.



Table 2.--Average hardwood stumpage prices in Missouri, statewide, 1996-2001
(Dollars/Mbf, International 1/4" scale)

Year/quarter	Red oak	White oak	Ash	Hard maple	Soft maple	Mixed hardwoods
1996	146	151	185	NA	NA	114
1997	165	146	NA	NA	NA	86
1998	190	175	NA	NA	NA	136
1999	171	220	130	NA	201	147
2000/1	150	130	105	85	210	165
2000/2	175	175	190	NA	180	55
2000/3	205	190	NA	NA	NA	175
2000/4	245	245	185	NA	375	125
2000 avg.	194	185	NA	NA	NA	130
2001/1	195	200	115	130	220	135
2001/2	170	185	120	120	225	115
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---

NA - Not available.

Source: Missouri Department of Conservation, Forestry Division.

Table 3.--Average hardwood stumpage prices in Maine, statewide, 1995-2000
(Dollars/Mbf, International 1/4" scale)



Year	Red oak	Yellow birch	White ash	Hard maple	Soft maple
1995	241	99	126	115	56
1996	275	109	130	136	63
1997	254	113	126	159	77
1998	246	120	123	157	83
1999	224	119	129	157	85
2000	245	122	127	187	80

Source: Management and Utilization Division, Maine Forest Service.

Table 4.--Average hardwood stumpage prices in the northern and delta and river regions of Mississippi, 1996-2001
(Dollars/Mbf, Doyle scale)



Year	North		Delta and River	
	Oak	Mixed hardwoods	Oak	Mixed hardwoods
1996	225	147	317	128
1997	246	178	NA	139
1998	301	191	368	154
1999	296	183	369	159
2000				
Jan-Feb	303	185	354	171
Mar-Apr	297	178	355	168
May-Jun	290	172	360	173
Jul-Aug	280	152	342	170
Sep-Oct	260	160	345	175
Nov-Dec	280	165	334	148
2000 average	285	169	348	168
2001				
Jan-Feb	275	158	345	152
Mar-Apr	289	142	353	145
May-Jun	346	152	345	116
Jul-Aug	---	---	---	---
Sep-Oct	---	---	---	---
Nov-Dec	---	---	---	---
2001 average	---	---	---	---

NA - Not available.

Source: Cooperative Extension Service, Mississippi State University, Mississippi State.

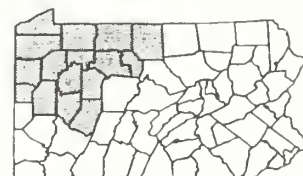
Table 5.--Average hardwood stumpage prices in Ohio, statewide, 1996-2001
(Dollars/Mbf, Doyle scale)



Year/season	White oak	Red oak	Cherry	Yellow-poplar
1996/spring	310	350	425	170
1996/fall	395	420	585	190
1997/spring	295	335	430	180
1997/fall	320	365	485	180
1998/spring	305	335	470	195
1998/fall	340	485	690	210
1999/spring	340	435	665	205
1999/fall	330	440	640	225
2000/spring	370	430	690	235
2000/fall	345	445	815	225
2001/spring	325	445	690	170
2001/fall	---	---	---	---

Source: Ohio Agricultural Statistics Service, Columbus.

Table 6.--Average hardwood mill prices of grade 1 logs in northwestern Pennsylvania, 1996-2001
(Dollars/Mbf, International 1/4" scale)



Year/quarter	Red oak	White Oak	Black cherry	Hard maple	Soft maple	Yellow-poplar
1996	504	370	654	343	205	195
1997	516	359	702	412	257	178
1998	597	320	966	458	313	198
1999	509	289	923	422	256	162
2000/1	535	283	1,091	487	264	177
2000/2	568	291	1,099	550	295	232
2000/3	568	351	1,198	532	292	195
2000/4	570	347	1,219	605	295	226
2000 avg.	560	318	1,152	543	286	207
2001/1	476	257	1,087	506	243	162
2001/2	467	226	966	549	253	166
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---

Source: Cooperative Extension Service, U.S. Department of Agriculture, The Pennsylvania State University.

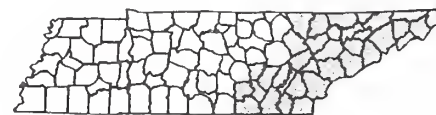
Table 7.--Average hardwood mill prices of grade 1 logs in Missouri, statewide, 1996-2001
(Dollars/Mbf, International 1/4" scale)



Year/quarter	Red oak	White oak	Cherry	Ash	Soft maple	Black walnut
1996	340	315	398	253	254	484
1997	445	424	519	376	398	611
1998	401	350	419	316	340	440
1999	422	394	634	366	435	471
2000/1	380	310	555	280	310	385
2000/2	400	290	300	300	360	385
2000/3	410	305	525	265	375	420
2000/4	445	360	625	285	395	470
2000 avg.	409	316	501	283	360	415
2001/1	415	335	460	335	435	360
2001/2	460	385	1,000	320	365	515
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---

Source: Missouri Department of Conservation, Forestry Division.

Table 8.--Average hardwood mill prices of grade 1 logs in eastern Tennessee, 1996-2001
(Dollars/Mbf, Doyle scale)



Year/quarter	Red oak	White oak	Walnut	Ash	Hard maple	Yellow-poplar
1996	713	638	500	550	350	325
1997	713	663	500	550	400	350
1998	732	669	500	550	419	362
1999	725	619	500	487	437	356
2000/1	875	675	500	550	550	438
2000/2	875	675	500	550	550	450
2000/3	875	675	500	550	550	450
2000/4	875	675	500	550	550	450
2000 avg.	875	675	500	550	550	447
2001/1	875	675	500	550	550	450
2001/2	875	675	500	550	550	450
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---

Source: The Tennessee Division of Forestry, Utilization Section.

Table 9.--Average hardwood mill prices in the northern and delta and river regions of Mississippi, 1996-2001
(Dollars/Mbf, Doyle scale)



Year	North		Delta and River	
	Oak	Mixed hardwoods	Oak	Mixed hardwoods
1996	306	212	414	214
1997	326	233	403	227
1998	380	262	430	239
1999	374	249	434	241
2000:				
Jan-Feb	375	262	429	256
Mar-Apr	370	255	430	259
May-Jun	370	260	435	260
Jul-Aug	351	254	430	248
Sep-Oct	350	255	440	259
Nov-Dec	365	265	410	246
2000 avg.	364	259	429	255
2001:				
Jan-Feb	357	270	425	255
Mar-Apr	365	250	433	230
May-Jun	380	245	437	222
Jul-Aug	---	---	---	---
Sep-Oct	---	---	---	---
Nov-Dec	---	---	---	---
2001 avg.	---	---	---	---

Source: Cooperative Extension Service, Mississippi State University.

Table 10.--Average hardwood mill prices of red oak logs in Ohio, statewide, 1996-2001
(Dollars/Mbf, Doyle scale)



Year/season	Average all grades	Grade 1 16 inches	Grade 1	Grade 2	Grade 3
1996/spring	425	690	460	255	135
1996/fall	520	855	540	295	140
1997/spring	470	795	515	305	145
1997/fall	440	745	430	245	145
1998/spring	470	740	420	275	165
1998/fall	500	800	515	315	160
1999/spring	460	805	540	275	145
1999/fall	510	855	615	305	155
2000/spring	465	860	455	285	130
2000/fall	540	960	580	335	160
2001/spring	560	825	595	385	165
2001/fall	---	---	---	---	---

Source: Ohio Agricultural Statistics Service, Columbus.

Table 11.—Green hardwood lumber prices, 1996-2001
(Dollars/Mbf)

Year/quarter	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
1996	705	349	845	698	493
1997	733	424	878	808	590
1998	775	405	1,043	860	610
1999	776	387	1,135	872	569
2000/1	780	450	1,135	980	610
2000/2	780	460	1,135	980	640
2000/3	780	460	1,115	980	640
2000/4	780	460	1,115	990	640
2000 avg.	780	458	1,125	983	633
2001/1	770	430	1,100	990	640
2001/2	730	390	1,075	990	630
2001/3	---	---	---	---	---
2001/4	---	---	---	---	---
2001 avg.	---	---	---	---	---

Source: Hardwood Market Report, Memphis, TN.

Table 12.—Kiln-dried hardwood lumber prices, 1996-2001
(Dollars/Mbf)

Year/quarter	4/4 Appalachian red oak 1C	4/4 Poplar 1C	4/4 Cherry 1C	4/4 Northern hard maple 1C	4/4 Northern soft maple 1C
1996	996	499	1,068	984	686
1997	1,063	587	1,131	1,123	792
1998	1,061	541	1,394	1,136	798
1999	1,066	514	1,610	1,199	762
2000/1	995-1,155	565-615	1,600-1,740	1,415-1,505	800-870
2000/2	980-1,135	585-635	1,570-1,710	1,400-1,490	830-900
2000/3	975-1,140	580-630	1,550-1,690	1,370-1,460	835-905
2000/4	980-1,135	575-635	1,500-1,650	1,355-1,475	815-895
2000 avg.	1,064	600	1,637	1,435	851
2001/1	950-1,085	540-600	1,385-1,535	1,330-1,450	780-860
2001/2	910-1,065	505-565	1,350-1,500	1,240-1,360	730-810
2001/3	---	---	---	---	---
2001/4	---	---	---	---	---
2001 avg.	---	---	---	---	---

Source: Weekly Hardwood Review, Charlotte, NC.

HARDWOOD PRODUCT PRICES, PRODUCTION, AND EMPLOYMENT

Table 13.—Producer price indexes for selected wood industries, 1996-2001
(1982=100)

Year/ quarter	Hardwood lumber	Hardwood dimension	Wood kitchen cabinets	Wood household furniture	Upholstered wood household furniture	Wood office furniture	All commodities
1996	163.9	173.1	150.4	158.3	140.0	153.5	127.7
1997	174.1	178.5	153.9	160.7	141.7	160.6	127.6
1998	178.7	180.9	156.9	164.0	143.5	164.2	124.4
1999	177.3	183.0	159.7	167.5	145.2	167.3	125.5
2000/1	183.9	185.3	162.4	169.2	146.6	169.7	129.6
2000/2	186.0	187.6	163.8	170.1	147.4	170.6	132.0
2000/3	186.7	190.3	165.0	170.6	148.0	171.7	133.8
2000/4	187.0	191.8	165.5	171.6	148.4	172.2	135.5
2000 avg.	185.9	188.8	164.2	170.4	147.6	171.1	132.7
2001/1	185.5	190.8	166.5	172.5	148.2	173.2	137.8
2001/2	182.0	190.3	167.0	173.7	149.4	173.9	136.2
2001/3	---	---	---	---	---	---	---
2001/4	---	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---	---

Source: Producer Price Indexes, U.S. Department of Labor, Bureau of Labor Statistics.

Table 14.—Value of domestic wood furniture shipments and wood furniture imports, 1994-99
(Millions of dollars)

Year	Value of domestic wood furniture shipments (actual \$) ¹	Value of domestic wood furniture shipments (1982 \$) ²	Value of wood furniture imports (actual \$, c.i.f.) ³	Value of wood furniture imports (1982 \$, c.i.f.) ²	Ratio of imports to domestic production ⁴
1994	9,921.2r	6,605	4,050	2,696	.41
1995	10,241.5	6,599	4,451	2,868	.43
1996	10,517.4	6,644	4,970	3,140	.47
1997	11,318.8r	7,043r	5,766	3,588	.51r
1998	12,372.7	7,544	6,870	4,189	.56
1999	12,951.0	7,732	8,550	5,104	.66

r – revised.

¹ Source: U.S. Department of Commerce.

² Deflated by wood household furniture price index listed in Table 13.

³ Source: U.S. Department of Commerce, Bureau of the Census.

⁴ Developed from columns 1 and 3.

**Table 15.—Production of oak strip flooring,
1995-2000**

Year	Oak strip flooring (thousand feet)
1995	330,212
1996	367,465
1997	416,618
1998	448,971
1999	536,073
2000	562,885

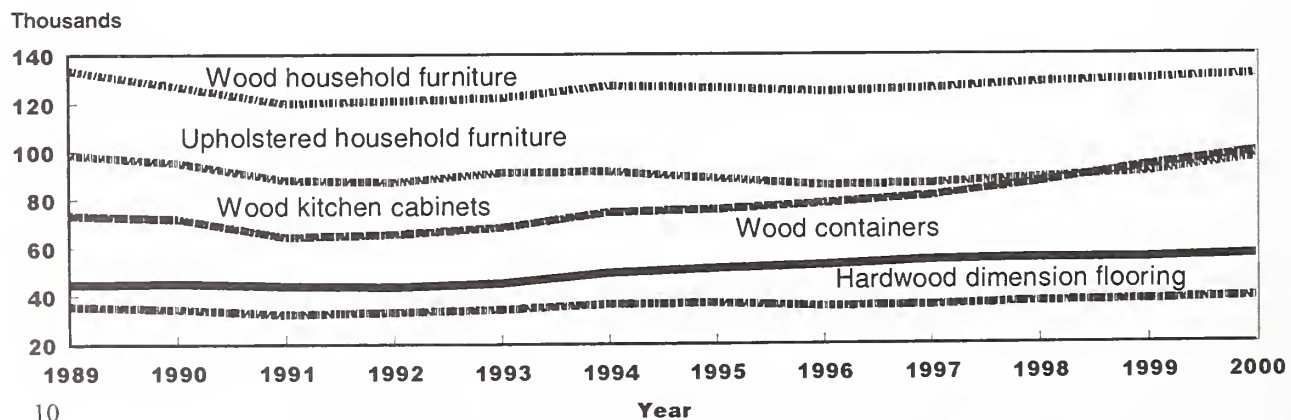
Source: National Oak Flooring Manufacturers Association.

Table 16.--Employment in selected wood-using industries, 1996-2001
(Thousands of employees)

Year/quarter	Wood containers (SIC 244)	Upholstered household furniture (SIC 2512)	Wood household furniture (SIC 2511)	Wood kitchen cabinets (SIC 2434)	Hardwood dimension and flooring (SIC 2426)
1996	52.4	85.9	124.8	78.4	35.5
1997	54.5	86.6	126.1	81.4	36.1
1998	55.2	88.9	128.7	87.0	37.3
1999	55.0	91.0	129.9	93.8	37.9
2000/1	56.1	96.5	132.3	98.1	38.3
2000/2	56.2	97.7	132.5	99.4	39.0
2000/3	56.2	96.9	131.1	100.6	39.2
2000/4	55.9	96.6	130.7	100.2	39.4
2000 avg.	56.1	96.9	131.7	99.6	39.0
2001/1	58.6	92.5	126.6	99.6	36.7
2001/2	59.3	90.3	123.4	98.9	35.8
2001/3	---	---	---	---	---
2001/4	---	---	---	---	---
2001 avg.	---	---	---	---	---

SIC – Standard Industrial Classification

Source: U.S. Department of Labor.



Employment in selected wood-using industries, 1989-2000.

INTERNATIONAL HARDWOOD PRODUCT TRADE

Table 17.—International exchange rate, foreign currency per U.S. dollar, 1996-2001

Year/qtr.	Belgium (franc)	Brazil (real)	Canada (dollar)	China (yuan)	France (franc)	Germany (mark)	Hong Kong (H.K. \$)	Italy (lira)
1996	30.968	1.0052	1.3637	8.3387	5.1158	1.5048	7.7345	1,542.6
1997	35.789	1.0779	1.3849	8.3193	5.8361	1.7339	7.7430	1,703.0
1998	36.301	1.1604	1.4836	8.3006	5.8979	1.7593	7.7466	1,736.4
1999	37.867	1.8192	1.4858	8.2781	6.1574	1.8359	7.7593	1,817.6
2000/1	40.890	1.7749	1.4535	8.2786	6.6492	1.9825	7.7818	1,962.7
2000/2	43.220	1.8024	1.4805	8.2782	7.0281	2.0955	7.7907	2,074.5
2000/3	44.657	1.8157	1.4823	8.2792	7.2617	2.1652	7.7983	2,143.5
2000/4	46.467	1.9309	1.5257	8.2777	7.5556	2.2528	7.7986	2,230.3
2000 avg.	43.808	1.8310	1.4855	8.2784	7.1236	2.1240	7.7924	2,102.8
2001/1	43.750	2.0192	1.5278	8.2774	7.1147	2.1213	7.7999	2,100.1
2001/2	46.193	2.2883	1.5411	8.2770	7.5113	2.2396	7.7996	2,217.2
2001/3	---	---	---	---	---	---	---	---
2001/4	---	---	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---	---	---

Year/qtr.	Japan (yen)	Malaysia (ringgit)	Mexico (peso)	Singapore (S.dollar)	South Africa (rand)	South Korea (won)	Spain (peseta)	U.K. (pound)
1996	108.81	2.5158	7.60	1.4099	4.3004	805.16	126.68	0.641
1997	121.09	2.8178	7.92	1.4857	4.6081	953.15	146.45	0.611
1998	130.82	3.9248	9.15	1.6721	5.5315	1,404.20	149.37	0.604
1999	113.72	3.8000	9.56	1.6947	6.1175	1,189.83	156.18	0.618
2000/1	107.00	3.8000	9.40	1.6979	6.3064	1,125.71	168.66	0.623
2000/2	106.69	3.8000	9.58	1.7220	6.8622	1,115.92	178.27	0.652
2000/3	107.71	3.8000	9.35	1.7342	7.0115	1,115.71	184.19	0.677
2000/4	109.89	3.8000	9.50	1.7455	7.6077	1,168.19	191.65	0.691
2000 avg.	107.82	3.8000	9.46	1.7249	6.9470	1,131.38	180.69	0.661
2001/1	118.14	3.8000	9.69	1.7516	7.8327	1,272.30	180.47	0.686
2001/2	122.63	3.8000	9.19	1.8143	8.0389	1,307.24	190.53	0.704
2001/3	---	---	---	---	---	---	---	---
2001/4	---	---	---	---	---	---	---	---
2001 avg.	---	---	---	---	---	---	---	---

Source: Federal Reserve Bank of St. Louis and Federal Reserve Board of Governors.

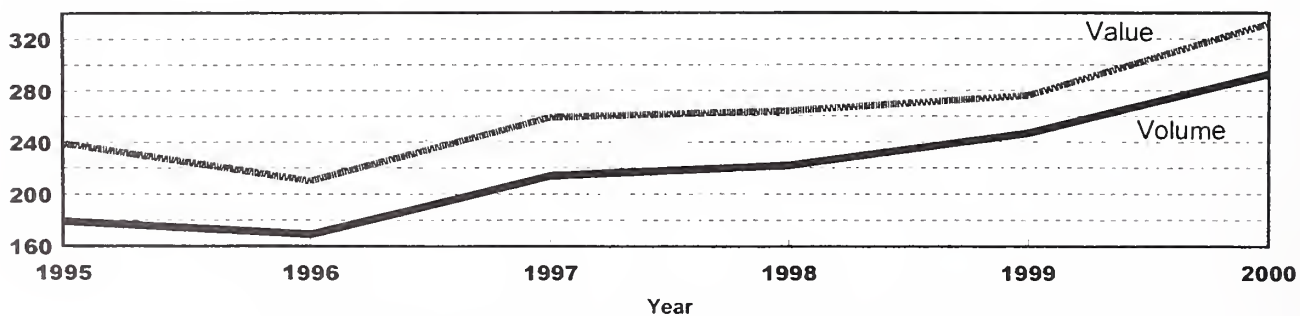
Table 18.—Volume and value of U.S. hardwood log exports, by region, 1996-2001
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1996	731,598	86,852	10,897	4,022	139,267	57,415
1997	973,348	119,098	19,108	7,803	181,380	74,850
1998	1,082,888	136,527	17,286	7,587	198,647	87,903
1999	1,236,647	146,884	21,907	8,027	190,690	86,617
2000/1	365,354	48,032	2,742	1,232	74,021	30,630
2000/2	290,960	36,852	3,417	1,243	101,353	37,347
2000/3	382,849	44,941	2,325	794	36,315	11,759
2000/4	375,666	43,823	3,438	1,117	60,916	29,465
Total 2000	1,414,829	173,648	11,922	4,385	272,605	109,201
2001/1	477,788	55,435	2,324	974	108,557	40,394
2001/2	317,451	37,417	3,295	1,358	73,670	29,309
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	263,746	99,784	759	301	1,146,627	248,373
1997	271,016	103,944	2,741	565	1,447,593	306,260
1998	198,787	79,644	1,473	442	1,499,081	312,104
1999	221,235	83,264	2,788	1,545	1,673,267	326,338
2000/1	75,756	29,850	898	522	518,771	110,267
2000/2	85,973	30,607	1,078	556	482,781	106,604
2000/3	45,042	14,861	1,065	765	467,596	73,119
2000/4	67,999	27,891	1,297	640	509,316	102,936
Total 2000	274,770	103,210	4,338	2,482	1,978,464	392,927
2001/1	93,312	41,468	1,517	530	683,498	138,800
2001/2	81,987	38,293	2,344	1,298	478,747	107,674
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.

1987 = 100



Volume and value index of all U.S. hardwood log exports, 1995 - 2000.

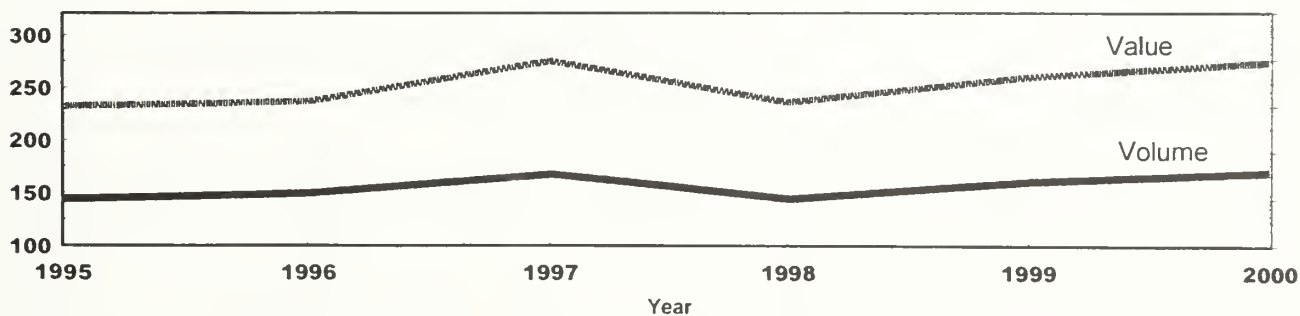
Table 19.--Volume and value of U.S. hardwood lumber exports, by region, 1996-2001
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1996	826,421	261,974	189,335	72,827	729,924	460,988
1997	902,051	331,544	178,757	71,538	918,843	566,264
1998	811,902	301,438	207,545	85,194	836,528	520,776
1999	950,589	347,841	237,028	100,651	801,002	507,768
2000/1	279,767	109,299	54,948	21,389	235,073	152,169
2000/2	267,959	103,297	61,643	23,602	217,311	137,777
2000/3	239,799	92,897	65,712	24,710	198,850	122,796
2000/4	238,387	91,427	70,146	25,856	186,314	115,387
Total 2000	1,025,912	396,920	252,449	95,557	837,548	528,130
2001/1	259,994	99,330	53,782	19,591	197,966	125,110
2001/2	228,125	84,997	47,692	18,313	200,599	122,556
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	736,854	377,847	65,541	35,119	2,548,075	1,208,754
1997	788,020	408,338	75,266	43,287	2,862,937	1,420,971
1998	555,887	267,596	54,276	31,876	2,466,138	1,206,880
1999	703,086	347,333	50,855	30,837	2,742,560	1,334,432
2000/1	173,056	86,621	12,885	7,851	755,729	377,328
2000/2	194,518	95,331	10,676	6,441	752,107	366,448
2000/3	193,864	92,902	11,561	7,295	709,786	340,599
2000/4	164,327	81,246	21,987	10,243	681,161	324,158
Total 2000	725,765	356,099	57,109	31,829	2,898,783	1,408,535
2001/1	167,883	78,767	7,094	4,399	686,719	327,196
2001/2	186,353	86,158	9,033	6,330	671,802	318,354
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.

1987 = 100



Volume and value index of all U.S. hardwood lumber exports, 1995 - 2000.

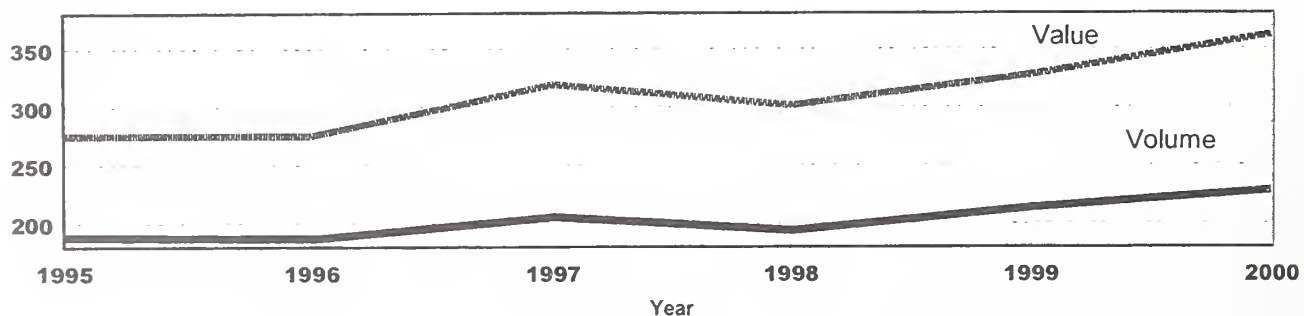
Table 20.--Volume and value of U.S. hardwood veneer exports, by region, 1996-2001
(Million square meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1996	40.3	55,014	7.9	10,722	140.5	175,426
1997	52.0	73,034	12.1	14,456	143.6	190,785
1998	58.8	82,705	9.0	12,357	137.7	184,799
1999	74.7	102,203	11.0	14,893	132.1	177,812
2000/1	22.1	31,739	3.2	3,862	32.3	46,026
2000/2	22.6	31,510	3.1	4,171	35.8	51,749
2000/3	20.5	28,940	2.6	3,503	27.0	38,291
2000/4	19.9	27,285	2.5	3,424	36.5	49,606
Total 2000	85.1	119,474	11.4	14,960	13.2	185,672
2001/1	24.6	32,012	2.4	3,327	36.6	51,383
2001/2	24.3	30,774	1.6	2,012	34.9	48,021
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	41.7	54,490	9.8	12,353	240.2	308,008
1997	45.4	66,564	10.3	12,580	263.5	357,418
1998	36.1	46,955	8.4	10,475	249.9	337,291
1999	46.0	59,228	10.6	12,179	274.4	366,313
2000/1	13.3	16,589	3.2	4,121	74.1	102,337
2000/2	15.5	21,188	3.2	4,083	80.1	112,701
2000/3	11.9	15,608	3.2	3,977	65.2	90,319
2000/4	12.1	16,081	3.5	3,710	74.4	100,105
Total 2000	52.7	69,467	13.1	15,890	293.8	405,462
2001/1	11.6	15,493	2.5	3,005	77.7	105,220
2001/2	13.5	17,346	3.1	3,346	77.4	101,500
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.

1987 = 100



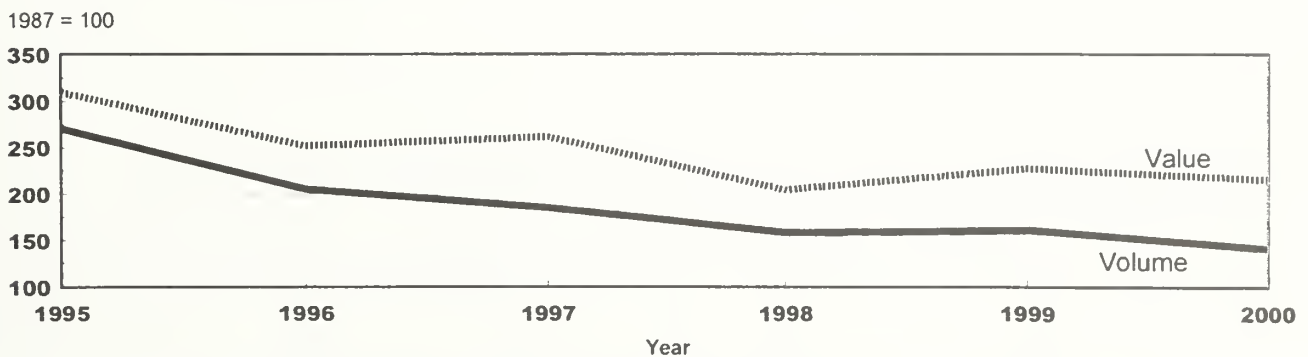
Volume and value index of all U.S. hardwood veneer exports, 1995 - 2000.

Table 21.—Volume and value of U.S. hardwood plywood exports, by region, 1996-2001
(Cubic meters and thousands of dollars, f.a.s.)

Year/qtr.	Canada		Central & South America and Caribbean		Western Europe	
	Volume	Value	Volume	Value	Volume	Value
1996	68,628	23,946	26,678	8,478	1,154	611
1997	59,500	23,930	23,617	8,298	5,513	1,505
1998	56,942	19,427	19,654	7,257	911	263
1999	50,036	20,084	30,304	11,161	1,279	337
2000/1	15,569	6,785	4,698	2,049	180	68
2000/2	11,763	5,692	4,992	1,884	251	61
2000/3	10,078	4,996	4,931	1,654	227	91
2000/4	9,532	4,762	4,868	1,566	45	29
Total 2000	46,942	22,235	19,489	7,154	703	249
2001/1	10,832	5,154	4,115	1,255	166	129
2001/2	12,977	6,361	4,806	1,579	153	74
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	9,418	3,078	2,389	442	108,267	36,558
1997	7,732	4,028	1,188	288	97,550	38,049
1998	4,699	2,444	880	224	83,086	29,616
1999	2,591	1,192	428	184	84,638	32,960
2000/1	398	176	32	8	20,877	9,086
2000/2	1,194	331	32	11	18,232	7,979
2000/3	968	364	52	19	16,256	7,124
2000/4	4,021	591	166	73	18,632	7,022
Total 2000	6,581	1,461	282	112	73,997	31,211
2001/1	932	466	0	0	16,045	7,004
2001/2	1,603	431	0	0	19,539	8,446
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.



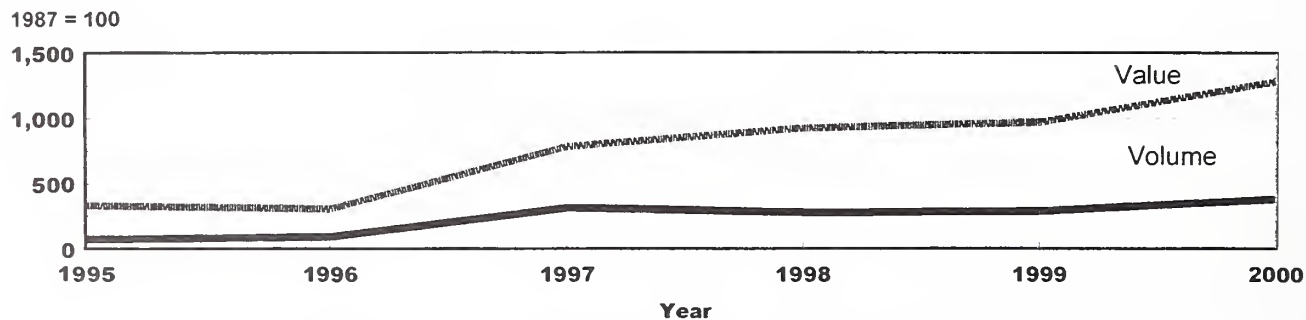
Volume and value index of all U.S. hardwood plywood exports, 1995 - 2000.

Table 22.--Volume and value of U.S. hardwood log imports, by region, 1996-2001
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1996	56,333	10,153	591	158	0	0
1997	187,856	24,710	3,751	1,235	855	698
1998	163,840	29,594	5,901	1,368	816	253
1999	167,478	30,785	7,313	1,372	1,459	567
2000/1	41,389	11,608	2,460	422	96	108
2000/2	44,013	8,497	1,443	572	244	151
2000/3	83,944	10,680	1,297	387	473	264
2000/4	57,830	10,684	1,122	298	217	137
Total 2000	227,176	41,469	6,322	1,679	1,030	660
2001/1	72,560	13,919	1,254	435	60	50
2001/2	34,372	7,600	1,297	429	250	125
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	283	147	1,607	627	58,814	11,084
1997	635	398	3,815	1,487	196,912	28,529
1998	734	569	2,444	1,857	173,735	33,642
1999	922	934	3,887	1,544	181,059	35,200
2000/1	219	141	1,407	624	45,571	12,902
2000/2	441	371	1,233	649	47,374	10,239
2000/3	533	263	1,296	661	87,543	12,255
2000/4	139	54	408	130	59,716	11,303
Total 2000	1,332	828	4,344	2,064	240,204	46,701
2001/1	572	484	2,015	517	76,461	15,405
2001/2	2,601	344	980	720	39,500	9,218
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.



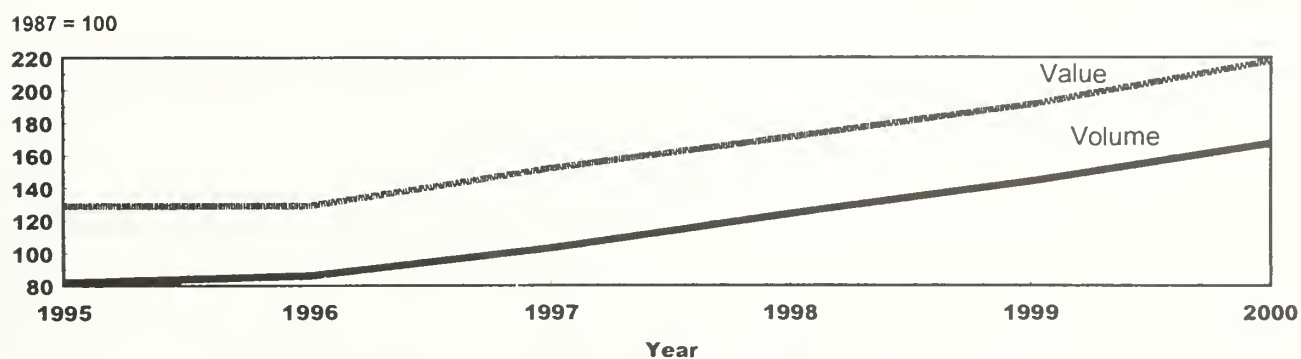
Volume and value index of all U.S. hardwood log imports, 1995 - 2000.

Table 23.--Volume and value of U.S. hardwood lumber imports, by region, 1996-2001
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1996	547,729	132,162	220,355	119,595	26,683	11,927
1997	710,436	176,154	214,958	114,149	28,971	16,309
1998	925,435	206,859	251,840	138,606	33,125	19,406
1999	1,102,642	245,947	257,073	143,630	30,136	18,154
2000/1	320,288	71,563	64,708	37,594	9,896	5,818
2000/2	305,740	69,253	71,338	37,973	14,522	8,013
2000/3	285,110	61,138	90,413	42,165	16,056	9,514
2000/4	313,273	65,974	67,958	38,139	13,399	7,323
Total 2000	1,224,411	267,927	294,417	155,872	53,873	30,669
2001/1	263,159	60,592	67,452	45,653	12,051	6,173
2001/2	250,478	58,855	53,046	33,205	13,177	8,092
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	100,228	62,501	15,010	4,784	910,005	330,968
1997	111,367	79,676	18,675	4,075	1,084,407	390,363
1998	92,937	67,610	10,520	4,469	1,313,857	436,949
1999	111,601	76,436	19,545	5,916	1,520,997	490,083
2000/1	40,216	20,593	5,159	2,125	440,267	137,692
2000/2	34,645	23,607	6,713	2,039	432,958	140,886
2000/3	45,599	24,497	9,791	2,400	446,969	139,714
2000/4	32,242	25,052	13,729	2,861	440,601	139,348
Total 2000	152,702	93,748	35,392	9,425	1,760,795	557,641
2001/1	31,186	21,888	13,492	3,424	387,340	137,730
2001/2	25,873	20,273	12,917	2,998	355,491	123,423
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.



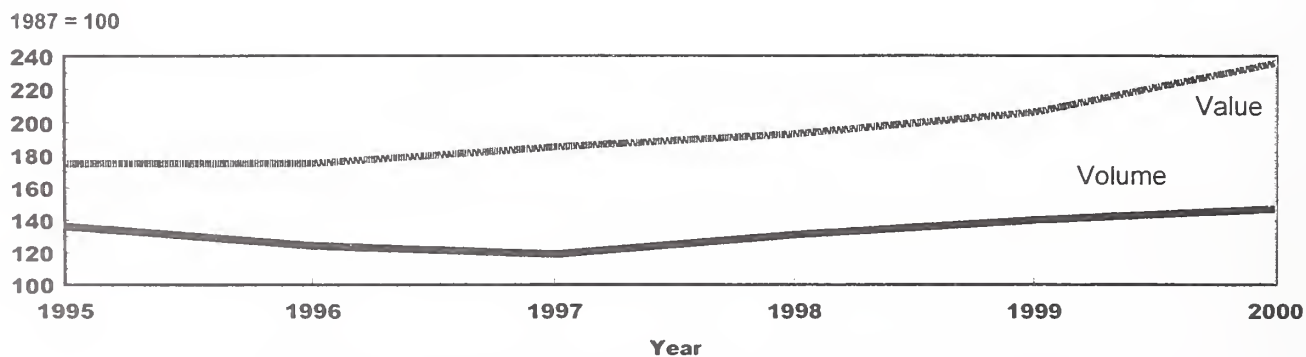
Volume and value index of all U.S. hardwood lumber imports, 1995 - 2000.

Table 24.—Volume and value of U.S. hardwood veneer imports, by region, 1996-2001
(Million square meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1996	110.6	153,306	47.3	49,948	15.9	17,516
1997	115.9	163,271	34.8	45,904	12.7	15,369
1998	122.3	163,452	32.7	43,149	20.3	22,770
1999	133.8	183,218	31.7	37,669	26.2	27,940
2000/1	38.4	54,322	8.5	10,461	7.0	7,736
2000/2	38.3	57,589	7.2	8,452	8.0	7,581
2000/3	32.2	50,213	6.0	7,617	5.1	6,051
2000/4	30.8	47,427	7.1	9,635	4.9	5,440
Total 2000	139.7	209,551	28.7	36,165	25.0	26,808
2001/1	32.4	50,770	6.9	8,198	4.3	5,136
2001/2	28.3	48,408	5.3	8,415	5.3	7,057
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	10.3	12,662	10.4	31,544	194.5	264,975
1997	8.9	12,338	13.0	43,399	185.3	280,281
1998	13.8	16,140	16.4	46,579	205.4	292,090
1999	11.0	14,543	15.6	48,631	218.5	312,000
2000/1	3.6	4,900	5.5	13,379	63.0	90,798
2000/2	2.3	4,270	4.9	13,799	60.7	91,691
2000/3	3.1	4,792	11.2	25,969	57.6	94,641
2000/4	1.7	2,790	4.5	13,984	49.0	79,276
Total 2000	10.7	16,753	26.2	67,130	230.4	356,407
2001/1	2.0	3,954	5.2	12,333	50.9	80,391
2001/2	1.6	2,226	6.3	13,560	46.9	79,666
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.



Volume and value index of all U.S. hardwood veneer imports, 1995 - 2000.

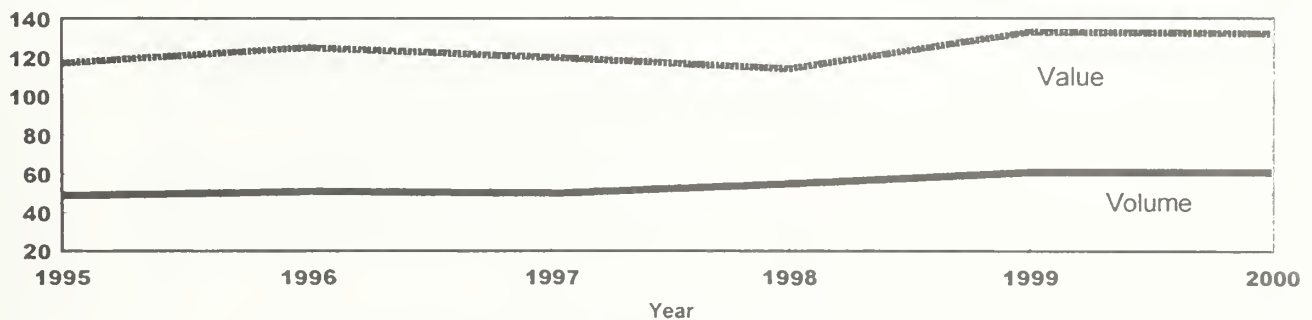
Table 25.--Volume and value of U.S. hardwood plywood imports, by region, 1996-2001
(Cubic meters and thousands of dollars, c.i.f.)

Year/qtr.	Canada		Central & South America and Caribbean		Africa	
	Volume	Value	Volume	Value	Volume	Value
1996	214,509	93,196	347,185	145,442	1,689	627
1997	253,286	116,947	350,048	140,644	152	114
1998	272,249	134,029	185,572	72,300	881	534
1999	297,190	157,470	275,804	97,048	1,619	659
2000/1	95,254	43,898	81,523	28,799	1,856	831
2000/2	85,996	44,027	86,482	28,847	1,787	575
2000/3	74,909	41,126	78,176	28,935	2,953	969
2000/4	84,197	42,398	91,074	34,208	5,891	1,933
Total 2000	340,356	171,449	337,255	120,789	12,487	4,308
2001/1	81,239	42,129	85,551	28,448	6,567	2,413
2001/2	91,164	45,803	86,019	26,293	5,195	1,622
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Year/qtr.	Asia and Pacific Ocean		All other		Total	
	Volume	Value	Volume	Value	Volume	Value
1996	1,001,738	501,683	179,202	64,933	1,744,323	805,879
1997	923,270	444,287	180,367	70,629	1,707,123	772,622
1998	1,217,893	441,262	203,580	91,060	1,880,175	739,185
1999	1,211,676	493,765	284,589	111,682	2,070,878	860,625
2000/1	293,777	117,726	75,623	28,986	548,033	220,239
2000/2	260,161	106,031	102,275	37,804	536,701	217,283
2000/3	265,817	106,512	87,197	34,236	509,052	211,779
2000/4	226,997	94,308	79,135	30,526	487,294	203,373
Total 2000	1,046,752	424,576	344,230	131,551	2,081,080	852,673
2001/1	229,125	91,908	77,725	30,291	480,207	195,190
2001/2	268,093	103,103	111,449	40,948	561,920	217,769
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.

1987 = 100



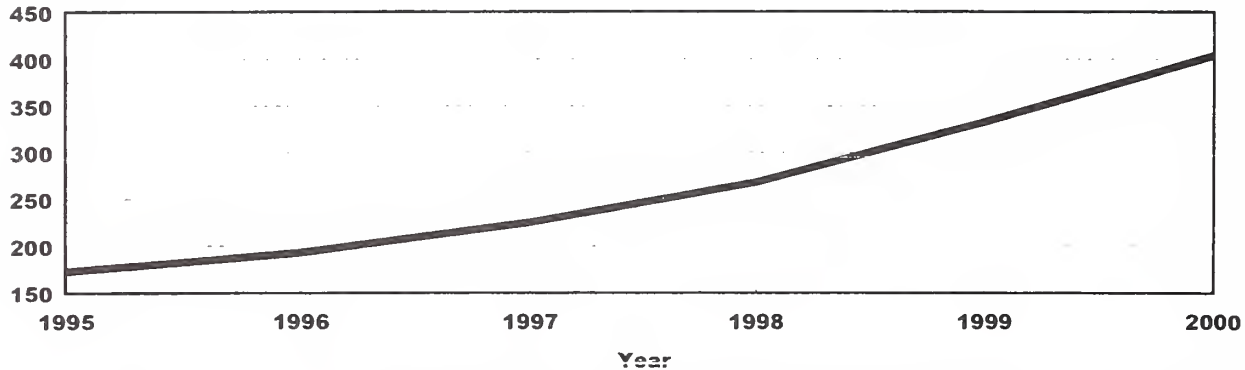
Volume and value index of all U.S. hardwood plywood imports, 1995 - 2000.

Table 26.--Value of U.S. wood furniture imports, by region, 1996-2001
(Thousands of dollars, c.i.f.)

Year/qtr.	Canada	Caribbean, South, and Central America	Europe	Asia, Middle East, and Pacific	All other	Total
1996	1,159,725	507,665	1,074,415	2,199,756	28,093	4,969,654
1997	1,460,377	629,273	1,190,400	2,458,208	27,331	5,765,589
1998	1,785,320	701,456	1,393,502	2,955,214	34,429	6,869,921
1999	2,173,010	800,299	1,636,374	3,908,433	32,366	8,550,482
2000/1	604,869	210,769	426,067	1,056,205	7,552	2,305,463
2000/2	632,002	224,618	506,336	1,175,101	10,749	2,548,805
2000/3	660,886	237,713	529,764	1,279,923	10,822	2,719,109
2000/4	659,167	241,558	576,515	1,307,973	11,385	2,796,597
Total 2000	2,556,924	914,657	2,038,684	4,819,201	40,507	10,369,973
2001/1	615,521	223,528	502,473	1,124,298	8,024	2,473,844
2001/2	616,482	222,103	482,680	1,152,188	10,994	2,484,447
2001/3	---	---	---	---	---	---
2001/4	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.

1987 = 100



Millions of dollars

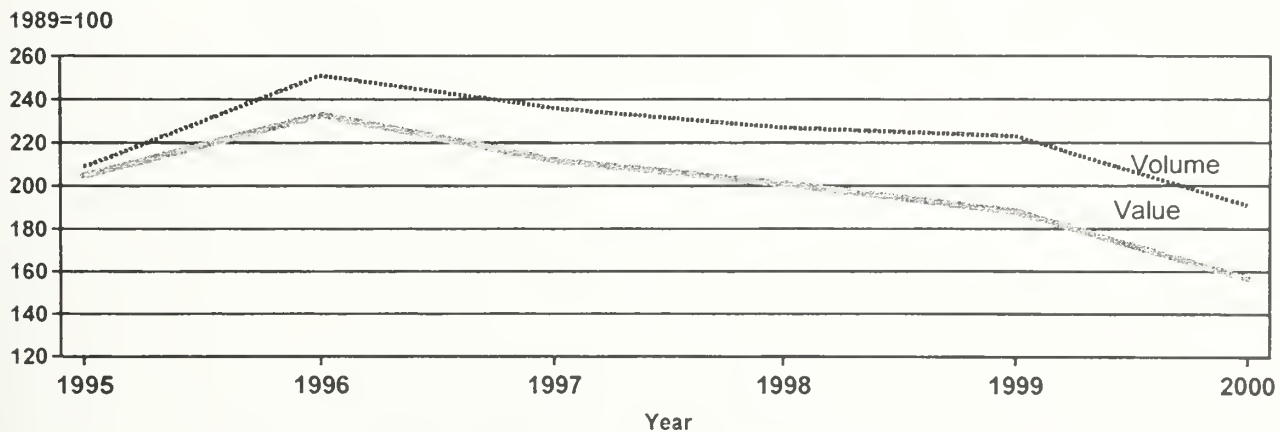


Table 27.—Volume and value of U.S. exports of nonconiferous chips, by region, 1996-2001
(Tons and thousands of dollars, f.a.s.)

Year/qtr.	Western Europe		Canada		Japan		Mexico	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1996	312	106	210,320	8,641	3,845,584	344,898	35	18
1997	1,753	174	294,811	10,520	3,687,410	320,192	107	62
1998	5,059	564	268,536	8,831	3,566,618	311,816	0	0
1999	7,895	909	250,204	8,197	3,320,756	278,124	253	94
2000/1	2,464	339	60,238	2,228	709,610	53,351	0	0
2000/2	3,287	329	71,007	2,404	663,206	53,911	0	0
2000/3	8,692	4,366	81,467	2,454	662,595	53,485	15,001	934
2000/4	10,599	5,607	81,406	2,464	699,342	56,953	0	0
Total 2000	25,042	10,642	294,118	9,549	2,734,753	217,700	15,001	934
2001/1	5,527	2,750	96,252	2,967	520,270	42,587	0	0
2001/2	5,696	1,872	70,417	2,289	462,075	35,699	0	0
2001/3	---	---	---	---	---	---	---	---
2001/4	---	---	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---	---	---

Year/qtr.	Taiwan		Korea		All other		Total	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
1996	61,268	6,127	176,047	17,599	8,045	331	4,301,611	377,718
1997	0	0	58,807	11,207	8,555	947	4,051,443	343,103
1998	0	0	33,390	3,477	10,702	1,502	3,884,305	326,190
1999	0	0	221,253	15,317	14,310	1,588	3,814,671	304,231
2000/1	0	0	46,152	2,206	4,632	964	823,096	59,089
2000/2	0	0	25,465	2,289	2,430	206	765,395	59,140
2000/3	376	211	23,228	2,820	2,441	1,333	793,800	65,604
2000/4	636	400	100,590	4,021	852	298	893,425	69,743
Total 2000	1,012	612	195,435	11,336	10,355	2,802	3,275,716	253,575
2001/1	767	455	46,185	2,154	5,291	655	674,292	51,568
2001/2	882	526	26,044	2,451	662	327	565,776	43,165
2001/3	---	---	---	---	---	---	---	---
2001/4	---	---	---	---	---	---	---	---
Total 2001	---	---	---	---	---	---	---	---

Source: U.S. Department of Commerce, Bureau of the Census.



Volume and value index of all U.S. exports of nonconiferous chips, 1995 - 2000.

Definition of Terms

c.i.f. (Cost, Insurance, Freight) - The term is used for shipment to designated overseas port of import. The seller quotes a price for the goods, including insurance, all transportation, and miscellaneous charges to the point of debarkation from vessel or aircraft.

f.a.s. (Free Alongside a Ship at designated U.S. port of export) - The seller quotes a price that includes charges for delivery of the goods alongside a vessel at the port. The seller handles the cost of unloading and wharfage. Loading, ocean transportation, and insurance are the buyer's responsibility.

Useful Conversion Factors

1 Mbf (lumber) = 2.36 cubic meters
1 Mbf* (logs - FAO) = 4.53 cubic meters
1 Mbf** (logs - Doyle scale) = 4.59 cubic meters
1 Mbf** (logs - International 1/4" rule) = 3.48 cubic meters
1 Mbf** (logs - Scribner) = 3.90 cubic meters
1 cubic meter = 35.32 cubic feet
1 ton = 2000 pounds
1 metric ton = 2204.623 pounds

* Factor used by the Food and Agricultural Organization of the United Nations.

** Approximation based on 16-foot log with a 15-inch diameter at the top end inside bark. Actual conversion will depend on the distribution of logs under consideration.

Literature Cited

Luppold, William G. 1995. Causes and remedies for errors in international forest products trade data: examples from the hardwood trade statistics. *Forest Science*. 41(2): 278-283.



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